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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,559	03/29/2005	Uwe Schwarz	60091.00379	7870

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EXAMINER	
YOUNG, JANELLE N	
ART UNIT	**PAPER NUMBER**
2618	

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/529,559	SCHWARZ ET AL.	
	Examiner	Art Unit	
	Janelle N. Young	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 29 March 2005.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-33 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-33 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 29 March 2005 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 7-12, 14, 16-21, 23-28, 30, and 32-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Amerga et al. (US Patent 2004/0116110).

As for claim 1, Amerga et al. teaches a radio resource control method in a mobile communication system comprising a serving cell formed by a serving base station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations, the method comprising:

camping, in an idle state, on the serving cell (Page 2, Para 0023-0024);

receiving, in the user equipment, control information for controlling cell change procedures of the user equipment, said cell change being conducted from the serving cell to a target cell (Page 3, Para 0029-0031); and

performing, in the user equipment, the cell change procedures based on the received control information (Page 2, Para 0023);

adjusting, before the control information is received, at least one element of said control information according to a predetermined time pattern, thus forming adjusted control information (Abstract; Page 1, Para 0003 & 0008-0010; and Page 9, Para 0088 & 0093); and

controlling the cell change procedures based on said adjusted control information (Abstract; Page 2, Para 0022; Page 3, Para 0028 & 0032; Page 4, Para 0035-0036 & 0039; Page 5, Para 0047; Page 6-7, Para 0060-0061; and Page 11, Para 0107 & 0110).

As for claim 2, Amerga et al. teaches a radio resource control method in a mobile communication system comprising a serving cell formed by a serving base station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations, further comprising adjusting at least one element of the idle state control information (Abstract; Page 2, Para 0022; Page 3, Para 0028 & 0032; Page 4, Para 0035-0036 & 0039; Page 5, Para 0047; Page 6-7, Para 0060-0061; and Page 11, Para 0107 & 0110).

As for claim 3, Amerga et al. teaches a radio resource control method in a mobile communication system comprising a serving cell formed by a serving base station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations, wherein performing the cell change procedures comprises:

selecting the target cell based on the adjusted control information; and camping on the target cell (Abstract; Page 2, Para 0023-0025; Page 7, Para 0061-0062; and Page 9, Para 0088).

As for claim 4, Amerga et al. teaches a radio resource control method in a mobile communication system comprising a serving cell formed by a serving base station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations, wherein performing the cell change procedures comprises:

measuring the quality of the serving cell; measuring the quality of at least one neighbor cell; ranking the measured cells based on the measured quality of the serving cell and the measured quality of the neighbor cell; and selecting the target cell based on the ranking (Page 3, Para 0030; Page 3-4, Para 0033-0034; Page 6-7, Para 0060; Page 7, Para 0062 & 0065; and Page 8, Para 0078 with respect to Page 1, Para 0010; Page 8, Para 0076 & 0080-0081; and Page 10, Para 0097-0099).

As for claim 5, Amerga et al. teaches a radio resource control method in a mobile communication system comprising a serving cell formed by a serving base station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations, further comprising adjusting at least one quality threshold of the serving cell; and wherein performing the cell change procedures comprises:

measuring the quality of the serving cell; triggering measurements on the neighbor cell based on the measured quality of the serving cell and the quality threshold of the serving cell; and selecting the target cell based on the triggered measurements (Page 10, Para 0098-0103).

As for claim 7, Amerga et al. teaches a radio resource control method in a mobile communication system comprising a serving cell formed by a serving base station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations, further comprising:

camping on the serving cell that uses a different radio-access technology from that used by the neighbor cell; adjusting an inter-radio access technology measurement threshold; and wherein performing the cell change procedures comprises: measuring the quality of the serving cell; triggering inter-radio access technology measurements on the neighbor cell based on the measured quality of the serving cell and the inter-radio access technology measurement threshold; and selecting the target cell based on the inter-radio access technology measurement (Abstract; Page 1, Para 0008-0010; Page 3-4, Para 0033; Page 6, Para 0057 & 0060; Page 7-8, Para 0073-0075; Page 9, Para 0089-0092; Page 10, Para 0101-0102; and Page 11, Para 0104).

As for claim 8, Amerga et al. teaches a radio resource control method in a mobile communication system comprising a serving cell formed by a serving base station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations, further comprising adjusting at least one

quality threshold of the neighbor cell; and wherein performing, in the user equipment, the cell change procedures comprises:

measuring the quality of the serving cell; triggering measurements on the neighbor cell based on the measured quality of the serving cell; measuring the quality of the neighbor cell; forming the candidate cell selection based on the measured quality of the neighbor cell and the quality threshold of the neighbor cell; and selecting the target cell based on the candidate cell selection (Page 2, Para 0023-0025; Page 4, Para 0034; Page 7, Para 70; and Page 9, Para 0090).

As for claims 9-10, Amerga et al. teaches a radio resource control method in a mobile communication system comprising a serving cell formed by a serving base station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations, further comprising adjusting at least one quality offset of the serving cell and/or adjusting at least one quality offset of the neighbor cell; and wherein performing, in the user equipment, the cell change procedures comprises:

measuring the quality of the serving cell, applying the quality offset of the serving cell to the measured quality of the serving cell, thus obtaining an offset-applied quality of the serving cell; measuring the quality of at least one neighbor cell; and selecting the target cell based on the measured quality of the neighbor cell, and the offset-applied quality of the serving cell and neighbor cell (Page 6, Para 0053; and Page 8, Para 0076).

As for claim 11, Amerga et al. teaches a radio resource control method in a mobile communication system comprising a serving cell formed by a serving base station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations, further comprising adjusting at least one temporary quality offset of the neighbor cell and a penalty time of the neighbor cell; and wherein performing, in the user equipment, the cell change procedures comprises:

> measuring the quality of the serving cell; measuring the quality of at least one neighbor cell; applying the quality offset of the neighbor cell to the measured quality of the neighbor cell for the duration of the penalty time, thus obtaining a temporary offset-applied quality of the neighbor cell; and selecting the target cell based on the measured quality of the serving cell and the temporary offset-applied quality of the neighbor cell (Page 9, Para 0090).

As for claim 12, Amerga et al. teaches a radio resource control method in a mobile communication system comprising a serving cell formed by a serving base station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations, further comprising adjusting at least one element of the control information to assumed capacity requirements of the mobile communication system (Abstract and Page 1, Para 0004 & 0009-0010).

As for claim 14, Amerga et al. teaches a radio resource control method in a mobile communication system comprising a serving cell formed by a serving base

station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations, further comprising:

camping, on the serving cell belonging to the same hierarchical cell structure as the neighbor cell; adjusting the prioritizing information of hierarchical (the hierarchy can be based on speed, cost, quality of service, traffic, etc. as a programmable parameter) cell structure; re-prioritizing the cells in a hierarchical cell structure using the adjusted prioritizing information; and performing the cell change procedures based on the re-prioritizing information (Page 2, Para 0023-0025 in correspondence with Page 9, Para 0084-0085 & 0090; Page 10, Para 0097; and Page 11, Para 0104).

As for claim 16, Amerga et al. teaches a radio resource control method in a mobile communication system comprising a serving cell formed by a serving base station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations, further comprising camping on the serving cell controlled by a base station controller different from the base station controller controlling the neighbor cell (Page 1, Para 0007 & 0009; Page 2, Para 0019-0026; Page 4, Para 0034-0035; Page 6, Para 0058; and Page 10, Para 0095).

Regarding claim 17, see explanation as set forth regarding claim 1 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 18, see explanation as set forth regarding claim 2 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 19, see explanation as set forth regarding claim 3 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 20, see explanation as set forth regarding claim 4 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 21, see explanation as set forth regarding claim 5 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 23, see explanation as set forth regarding claim 7 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 24, see explanation as set forth regarding claim 8 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 25, see explanation as set forth regarding claim 9 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 26, see explanation as set forth regarding claim 10 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 27, see explanation as set forth regarding claim 11 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 28, see explanation as set forth regarding claim 12 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 30, see explanation as set forth regarding claim 14 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 32, see explanation as set forth regarding claim 16 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 33, see explanation as set forth regarding claim 1 (method claim) because the claimed network element for radio resource control in a mobile communication system would perform the method steps.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 6 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amerga et al. (US Patent 2004/0116110) as applied to claim 1 above, and further in view of Coutant (US Patent 2002/0173275).

As for claim 6, Amerga et al. teaches a radio resource control method in a mobile communication system comprising a serving cell formed by a serving base station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations, further comprising:

adjusting at least one inter-frequency measurement threshold; and wherein performing the cell change procedures comprises: measuring the quality of the serving cell; triggering inter-frequency measurements on the neighbor cell based on the measured quality of the serving cell and the inter-frequency measurement threshold; and selecting the target cell based on the inter-frequency measurement (Abstract; Page 1, Para 0008-0010; Page 3-4, Para 0033; Page 6, Para 0057 & 0060; Page 7-8, Para 0073-0075; Page 9, Para 0089-0092; Page 10, Para 0101-0102; and Page 11, Para 104 of Amerga et al.).

What Amerga et al. does not explicitly teach is the use of different carrier frequency for planning a radio resource control method in a mobile communication system.

However Coutant teaches a radio resource control method in a mobile communication system adjusting at least one inter-frequency measurement threshold;

and wherein performing the cell change procedures comprises of camping on the serving cell that uses a different carrier frequency from that used by the neighbor cell. (Page 3, Para 0043, 0045, & 0051 of Coutant).

It would have been obvious to one of ordinary skill of the art at the time the invention was made to incorporate a apparatus and methods to allow a change of radio access technology even between uncoordinated radio access networks, as taught by Amerga et al. in Page 11, Para 0104-0105, in the radio resource control method in a mobile communication system that uses a different carrier frequency of Coutant, because Coutant already teaches telecommunication networks of the GSM type (Abstract and Page 3, Para 0043 & 0051 of Coutant).

The motivation of this combination would be the effect of switching from idle mode to dedicated mode when a communication is established and a plurality of cells in a telecommunication network, as taught by Coutant and Amerga et al., because the cells on which said terminal can camp in idle mode or dedicated mode, controlled by base stations intended to manage such switching when a communication is established.

The incorporation of the radio resource control methods in a mobile communication system would allow the integration of differing mobile telecommunications systems, in particular for detecting, monitoring and accessing radio networks and easier changing of radio access technologies even between uncoordinated radio access networks.

Regarding claim 22, see explanation as set forth regarding claim 6 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

3. Claims 13, 15, 29, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amerga et al. (US Patent 2004/0116110) as applied to claim 1 above, and further in view of Lescuyer et al. (US Patent 2004/0147262).

As for claim 15, Amerga et al. teaches radio resource control method in a mobile communication system comprising a serving cell formed by a serving base station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations (Abstract; Page 1, Para 0010; Page 2, Para 0025; Page 3, Para 0027-0033 of Amerga et al.).

What Amerga et al. does not explicitly teach is the idle states for planning a radio resource control method in a mobile communication system.

However, Lescuyer et al. teaches a radio resource control method in a mobile communication system comprising a serving cell formed by a serving base station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations, further comprising adjusting at least one element of the control information based on assumed cell load of the serving cell (Page 3, Para 0003-0011; Page 2, Para 0025; Page 4-5, Para 0061; and Page 6, Para 0072 of Lescuyer et al.).

It would have been obvious to one of ordinary skill of the art at the time the invention was made to incorporate a apparatus and methods to allow a change of radio access technology even between uncoordinated radio access networks, as taught by Lescuyer et al. in Page 6, Para 0050, in the radio resource control method in a mobile communication system that uses a different carrier frequency of Amerga et al., because Amerga et al. already teaches telecommunication networks of the GSM type (Page 1, Para 0005; Page 2, Para 0026; Page 3, Para 0032; and Page 4, Para 0039 of Amerga et al.).

The motivation of this combination would be the effect of switching from idle mode to dedicated mode when a communication is established and a plurality of cells in a telecommunication network, as taught by Amerga et al., because the cells on which said terminal can camp in idle mode or dedicated mode, controlled by base stations intended to manage such switching when a communication is established.

The incorporation of the radio resource control methods in a mobile communication system would allow the integration of differing mobile telecommunications systems, in particular for detecting, monitoring and accessing radio networks and easier changing of radio access technologies even between uncoordinated radio access networks.

As for claim 13, Lescuyer et al. teaches a radio resource control method in a mobile communication system comprising a serving cell formed by a serving base station, at least one neighbor cell formed by a neighbor base station, and user equipment capable of receiving signals from said base stations, further comprising

camping in one of the following idle states specified in the 3GPP specifications: idle mode, CELL_FACH state, URA_PCH state, CELL_PCH state (Page 5, Para 0062 and Page 6, Para 0077 of Lescuyer et al.).

Regarding claim 29, see explanation as set forth regarding claim 13 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Regarding claim 31, see explanation as set forth regarding claim 15 (method claim) because the claimed system for radio resource control in a mobile communication system would perform the method steps.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle N. Young whose telephone number is (571) 272-2836. The examiner can normally be reached on Monday through Friday: 8:30 am through 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JNY
July 11, 2006

7/20/06

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PRIMARY EXAMINER